

FIG.1

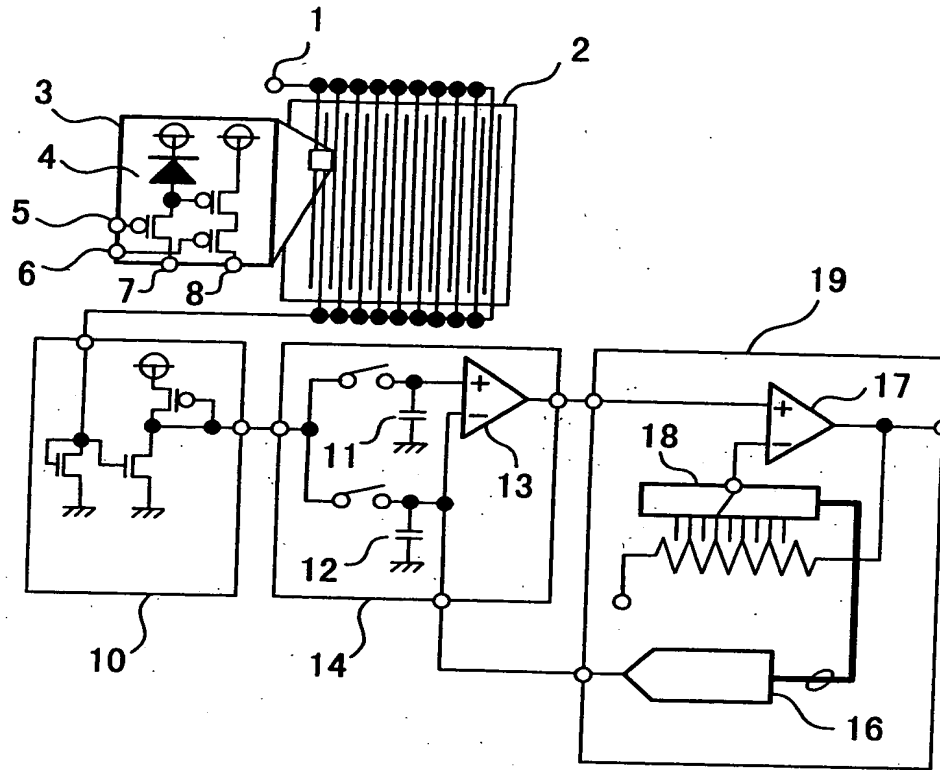


FIG.2A

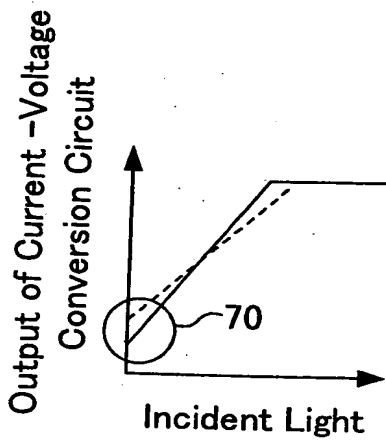


FIG.2B

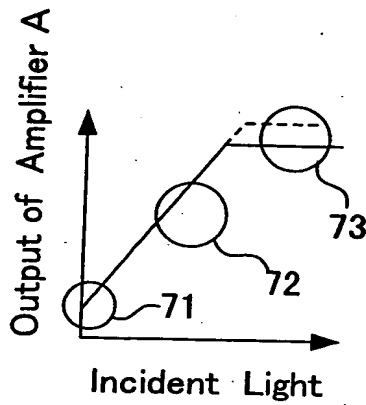


FIG.2C

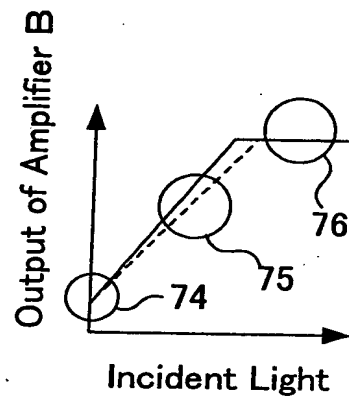
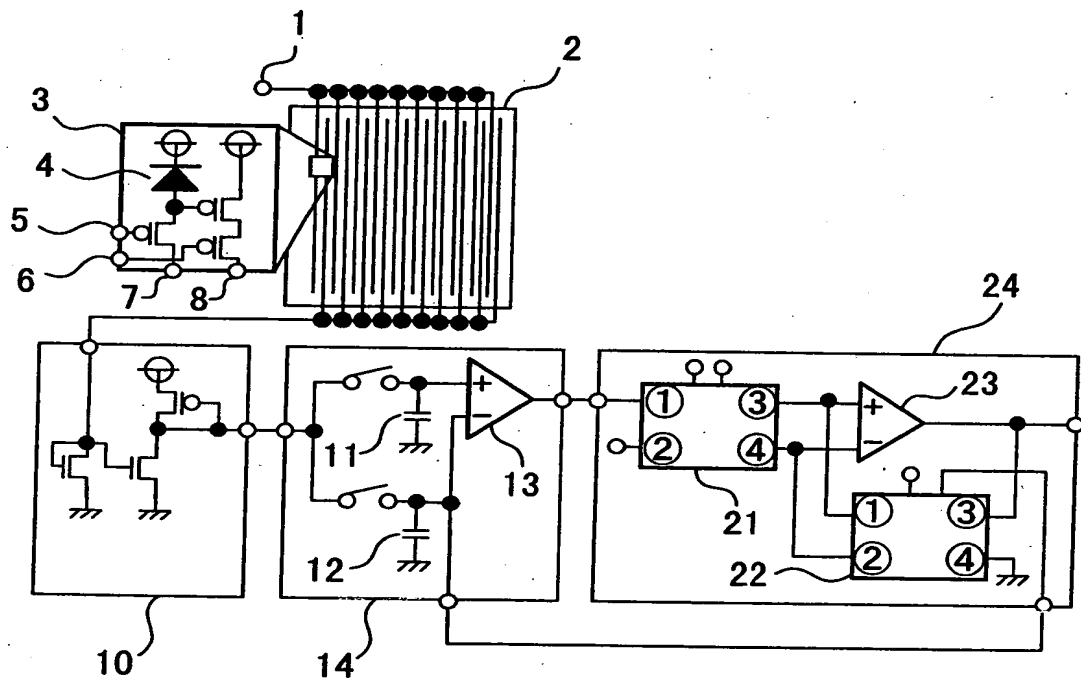


FIG.3



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This circuit diagram illustrates the electronic control for a magnetic head assembly. A power source (30) is connected to a coil (2) via a switch (36). The coil is part of a magnetic head assembly (2) that includes a core (3) and a winding (4). The winding is connected to a differential amplifier (10) through a series of resistors (5, 6, 7, 8). The differential amplifier (10) is composed of two transistors (pnp and npn) and a current source. The output of the differential amplifier is connected to a series of switches (11, 12A, 12B) and a current source (13). The switches are controlled by a control signal (14B). The output of the switches is connected to a differential amplifier (23) through a series of resistors (21, 22). The differential amplifier (23) is composed of two transistors (pnp and npn) and a current source. The output of the differential amplifier (23) is connected to a series of resistors (24, 25).

FIG.5

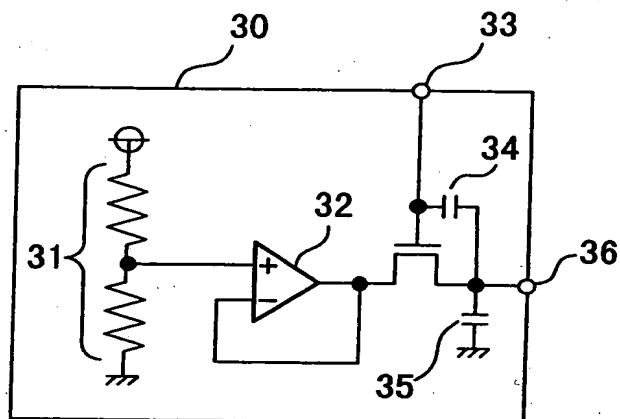


FIG.6

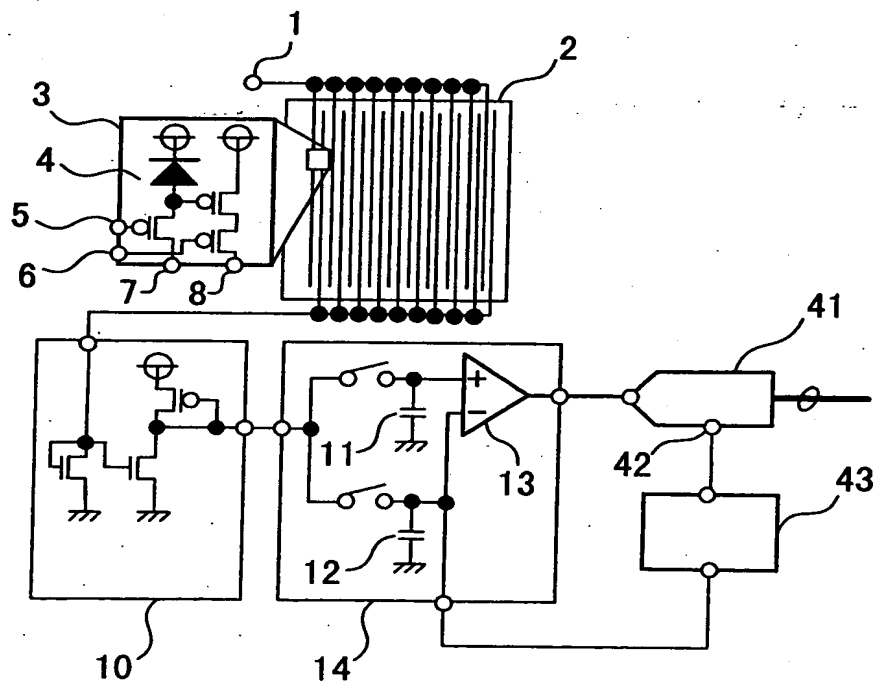
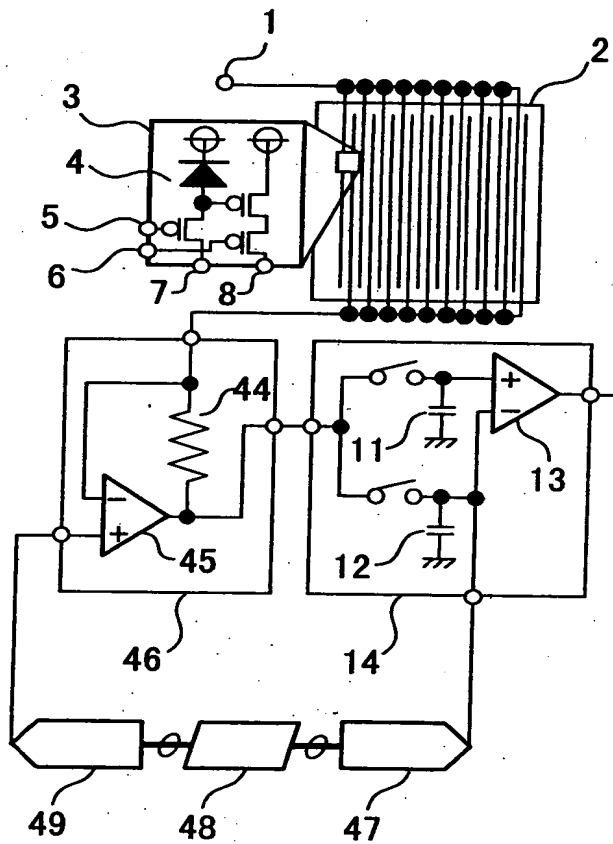


FIG.7



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The schematic diagram illustrates a magnetic field sensor system. It includes a magnetoresistive element (2) with two sets of electrical contacts (1). A first driver circuit (3) is connected to one set of contacts, featuring a differential pair of transistors (4) and a current source (5), with additional nodes labeled 6, 7, and 8. A second driver circuit (10) is connected to the other set of contacts, also using a differential pair of transistors. The outputs of both driver circuits are fed into a summing junction (11) of an operational amplifier (13). The op-amp's non-inverting input (+) is biased by a voltage divider network (12) consisting of two resistors connected to ground. The output of the op-amp (13) drives a relay or switch mechanism (14). This mechanism controls the connection between a reference resistor (54) and a sensing resistor (50). The sensing resistor (50) is part of a bridge circuit where its resistance varies with the magnetic field. The bridge output is measured across terminals 51 and 52, which are also connected to a measurement unit (53). Other components like 55, 56, and 57 are shown as part of the signal processing or control logic.

FIG.9

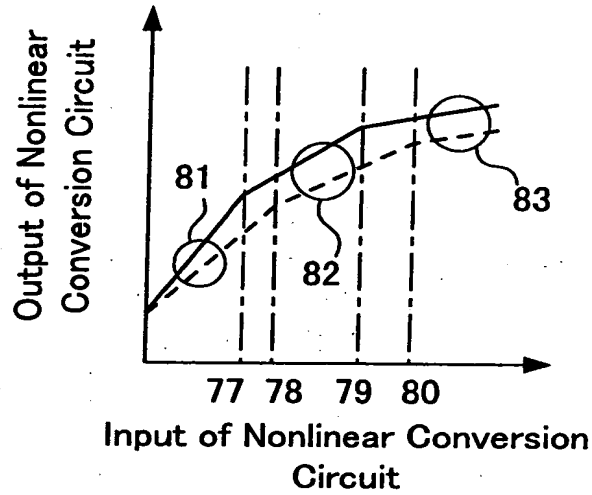


FIG.10A

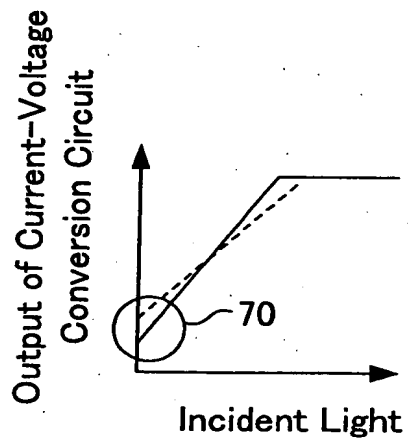


FIG.10B

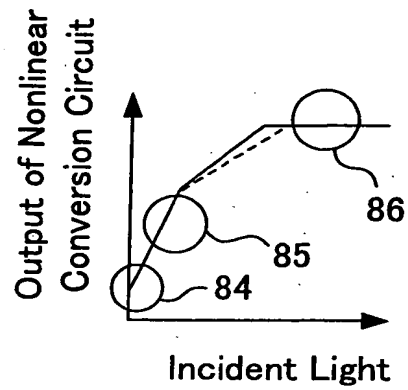


FIG.11A

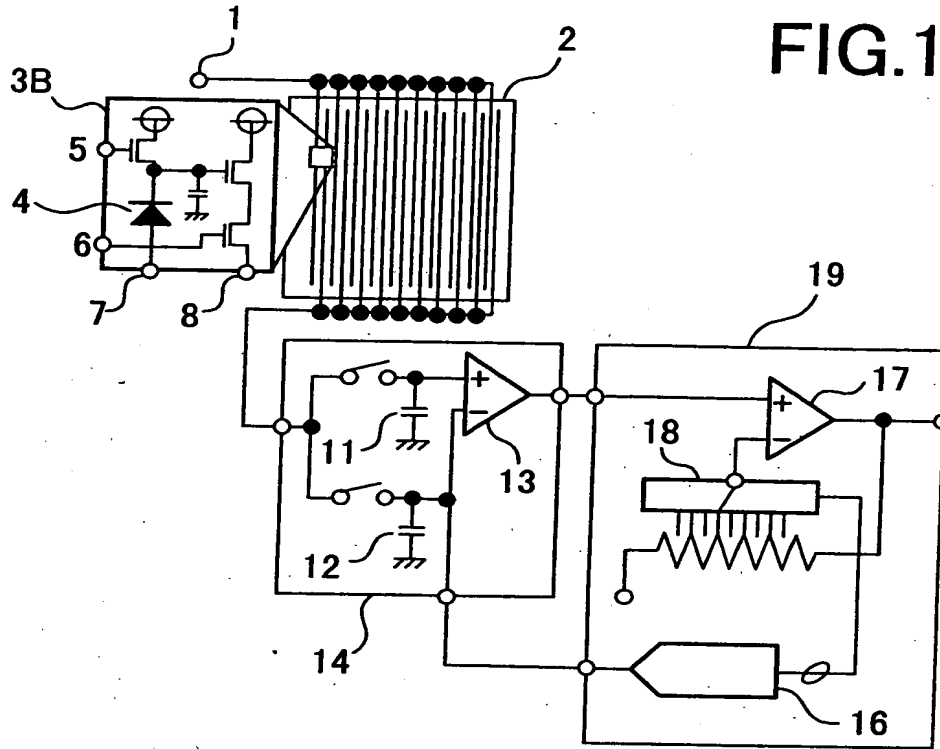
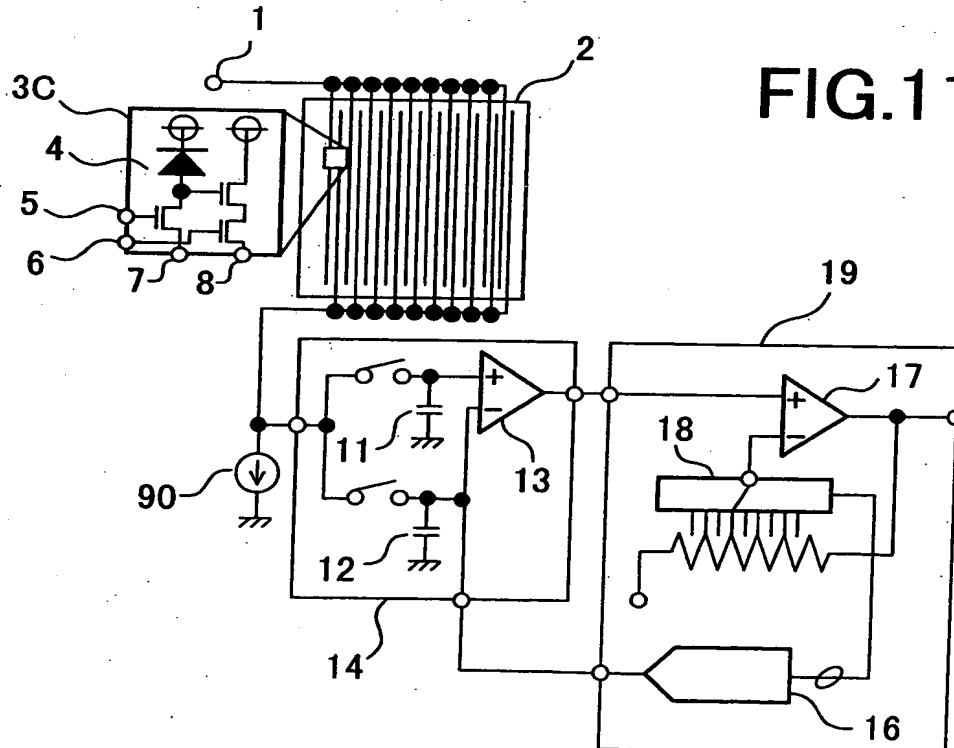


FIG.11B







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FIG.14

PRIOR ART

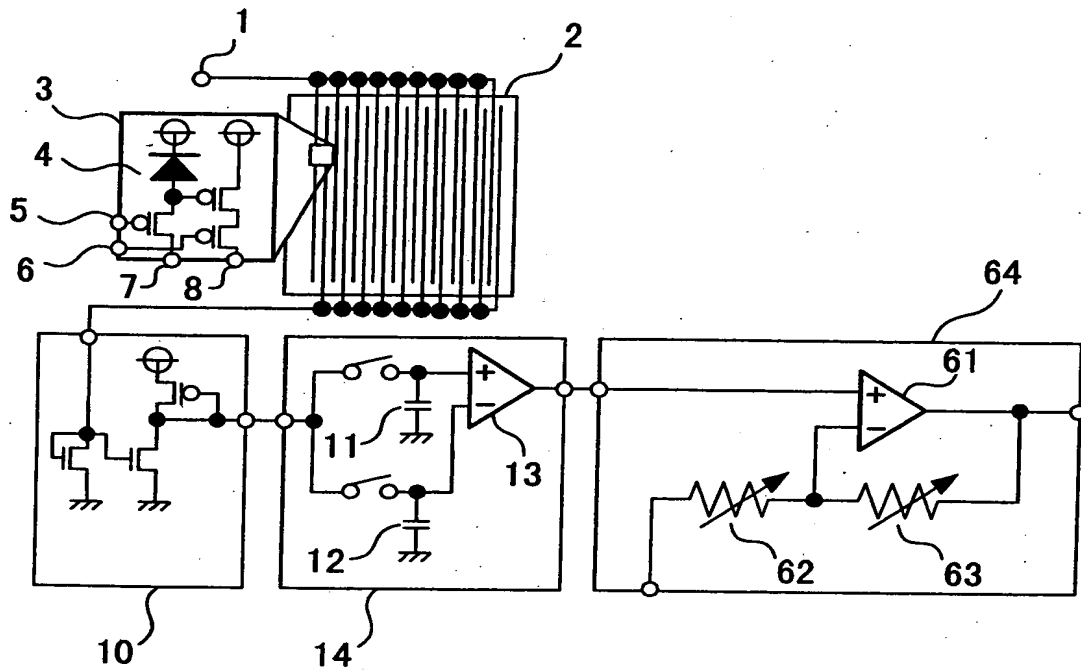


FIG.15A

FIG.15B

PRIOR ART

